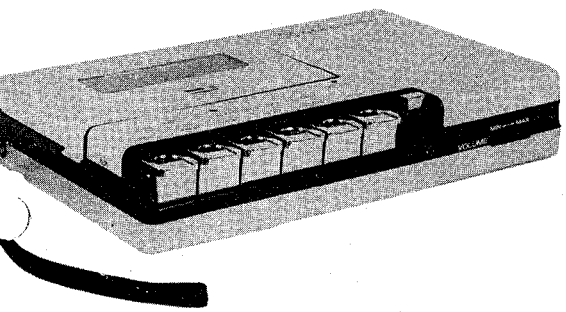
Gold Star Audio

SERVICE MANUAL

for service technician



Gold Star Co., Ltd.

CASSETTE TAPE RECORDER

TCM-508

SPECIFICATIONS

This specifications may be changed for improvement of performance without notice.

o Track system	2 tracks monaural
o F.F & Rewind time	110 sec (C-60)
o Wow & Flutter	0.3 % WRMS
o Semi-conductors	1IC, 1TR, 3Diodes, 2 1LED
o Frequency response	125-6300 Hz
o Output power	500 mW
o S/N ratio	45 dB
o Recording & Erasure system	DC Bias
o Power source	DC 6V Dry Battery (AAM-type 1.5 vx4) DC 6V Adaptor
o Power consumption	3 W
o Speaker	57 mm (2¼"), 8 Ω
o Weight	620 g (w/o Batteries)
o Dimensions	118(H)X X 184 (W) X 34(D) m/m

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OPERATING CONTROLS

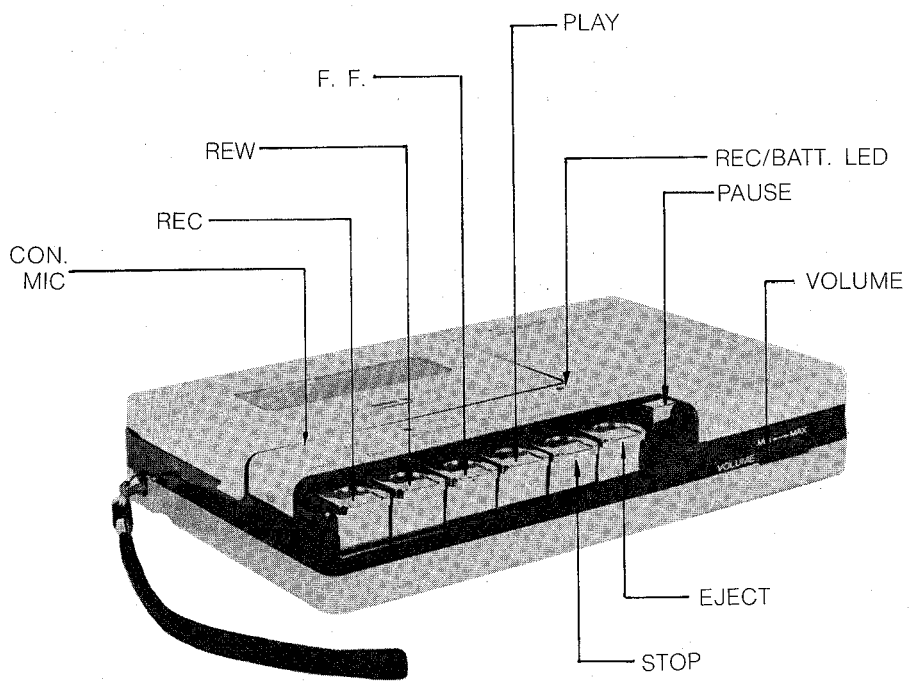


Fig. 1

DISASSEMBLY INSTRUCTIONS

1. Removal of buttom case
   Remove 4 screws Ⓐ (See Fig. 2)

2. Removal of PWB
   Remove 2 screws Ⓑ (See Fig. 3)

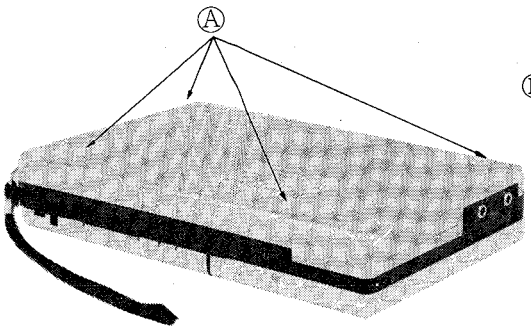


Fig. 2

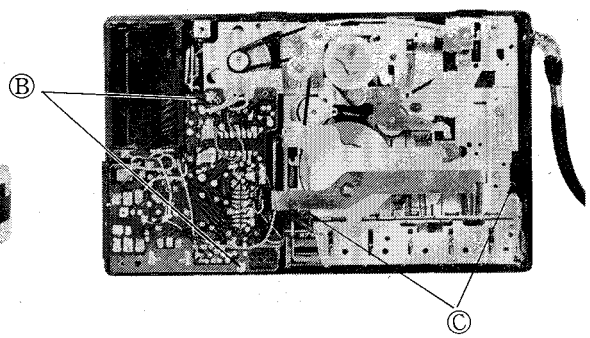


Fig. 3

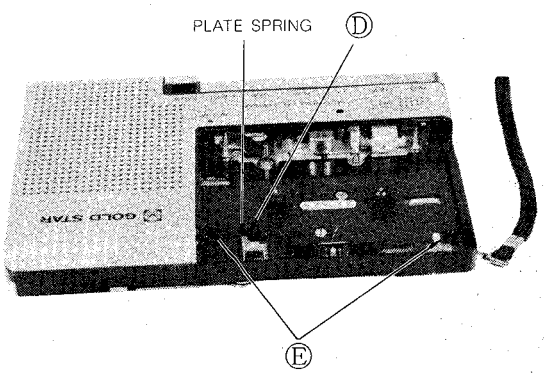


Fig. 4

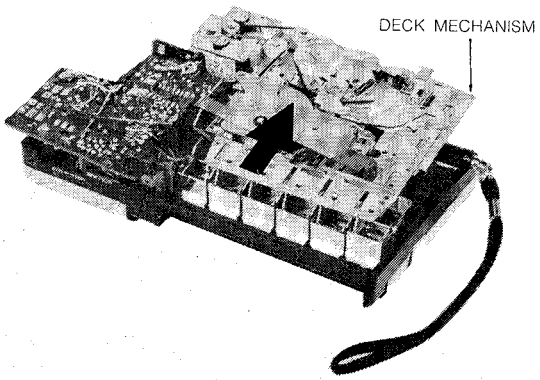


Fig. 5

3. Removal of deck mechanism
   1. Remove 2 screws Ⓒ , and then remove 1 screw Ⓓ to take out the plate spring. (See Fig. 3, 4)
   2. Remove 2 screws Ⓔ and lift up the deck mechanism in direction of arrow. (See Fig. 4, 5)

ALIGNMENT

Step	Item	Input signal	Procedure	Output test point	Remarks
1	Speed Adjustment	MTT-111 (3kHz, -10dB)	1) Playback the test tape. 2) Adjust the semi-fixed resistor (R104) which is located in governor PWB	Earphone output terminal by frequency counter	Frequency counter should read 3000 Hz.
2	Azimuth Adjustment	MTT-113 (6.3kHz, -10dB)	1) Playback the test tape. 2) Adjust the azimuth adjustment screw.	Earphone output terminal by VTVM.	VTVM should read maximum value.

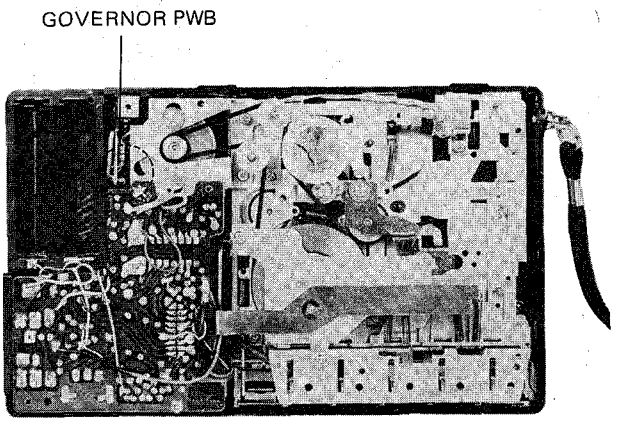


Fig. 6

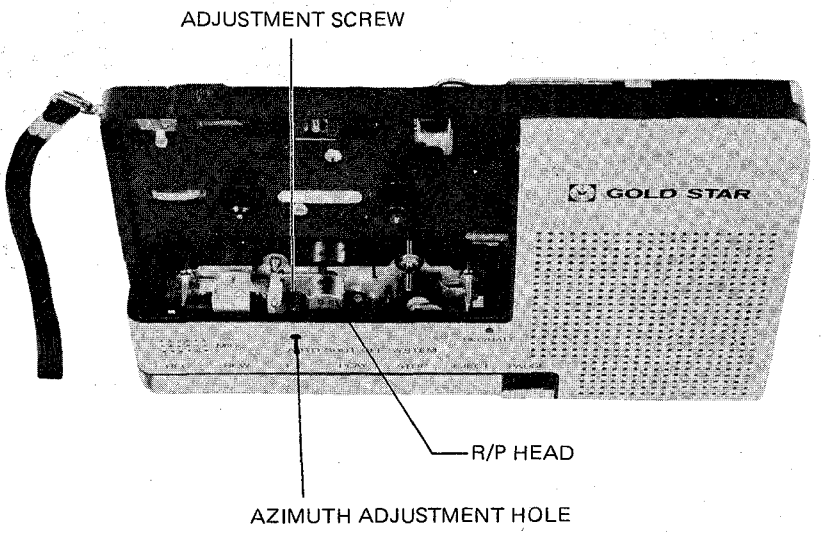
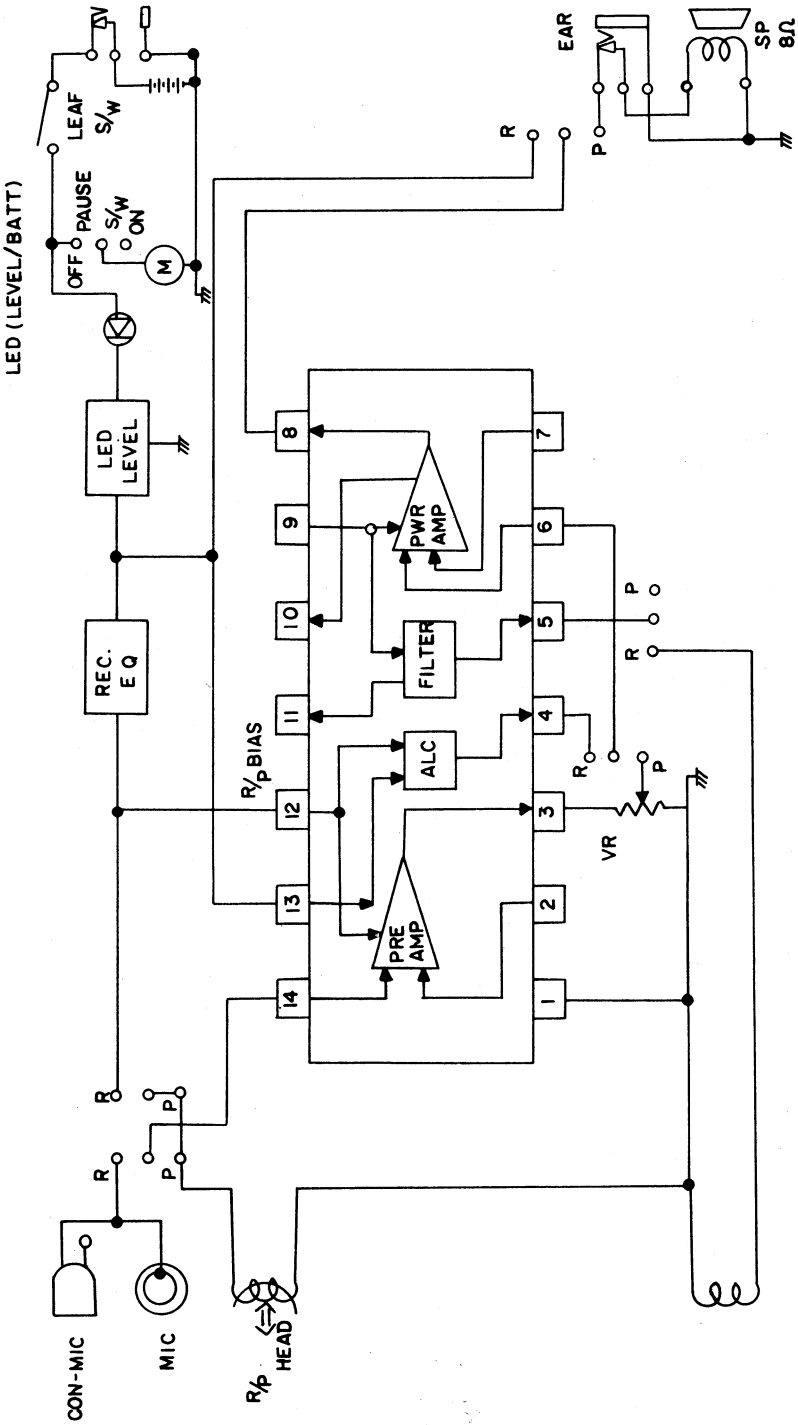
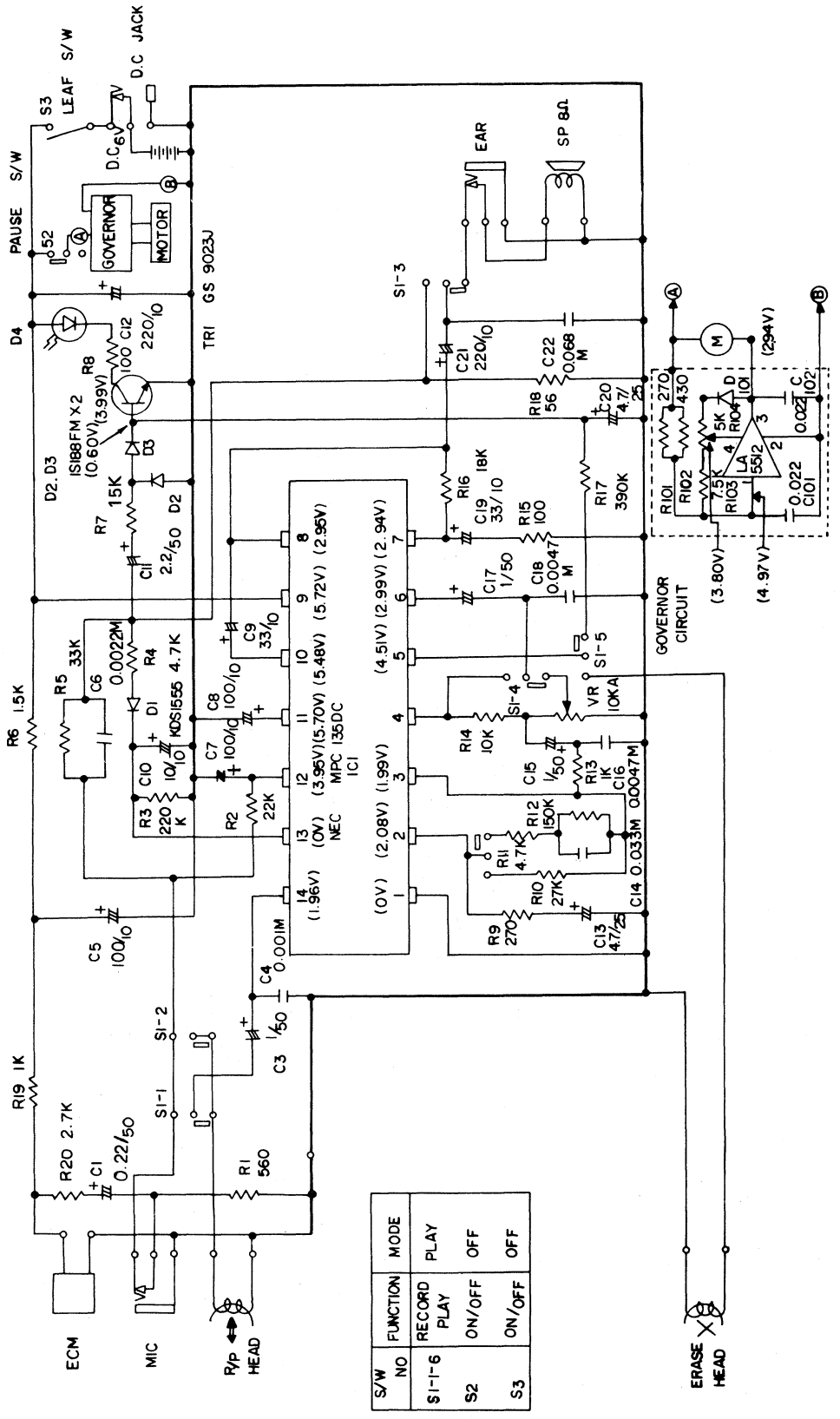


Fig. 7

BLOCK DIAGRAM



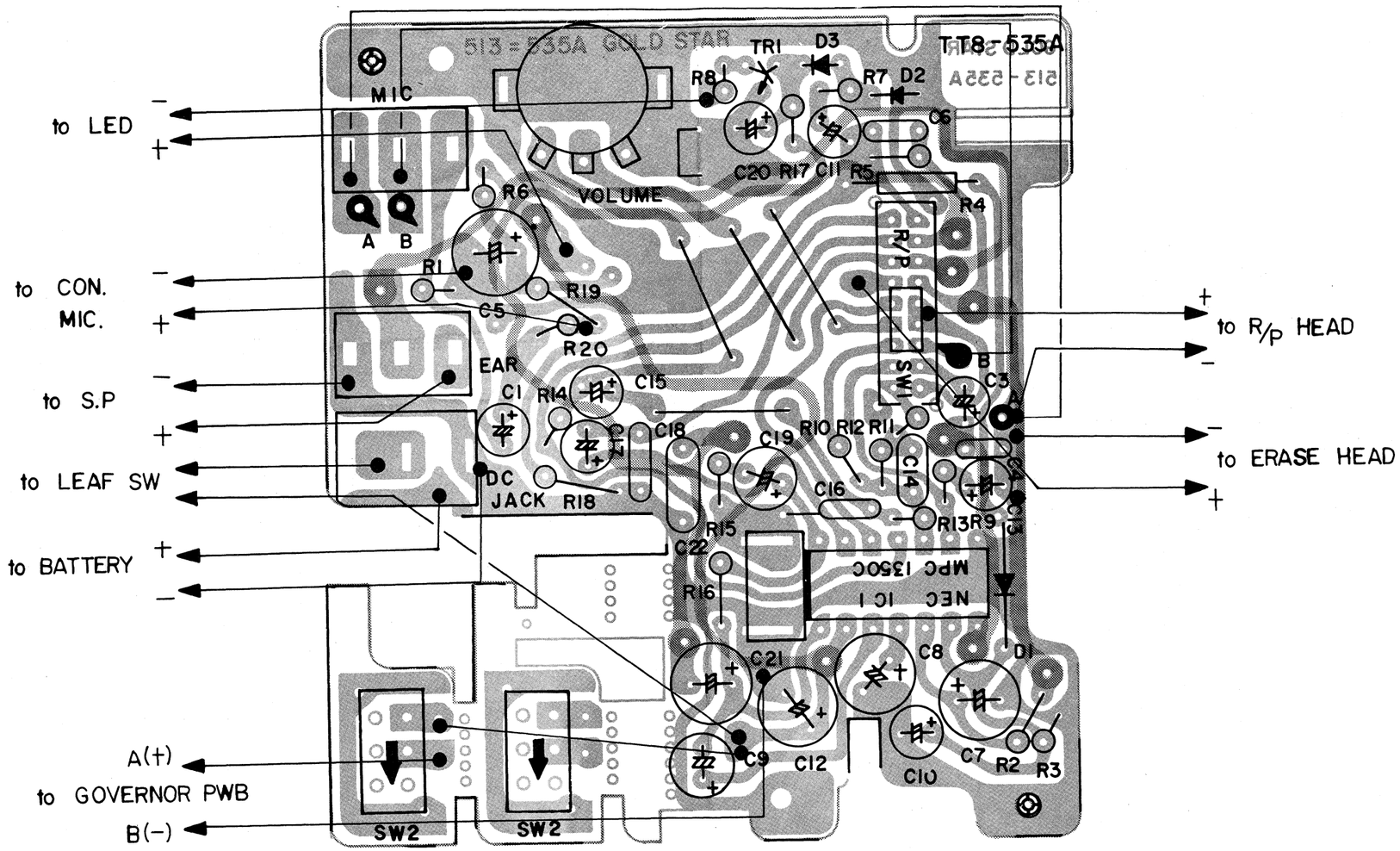
SCHEMATIC DIAGRAM



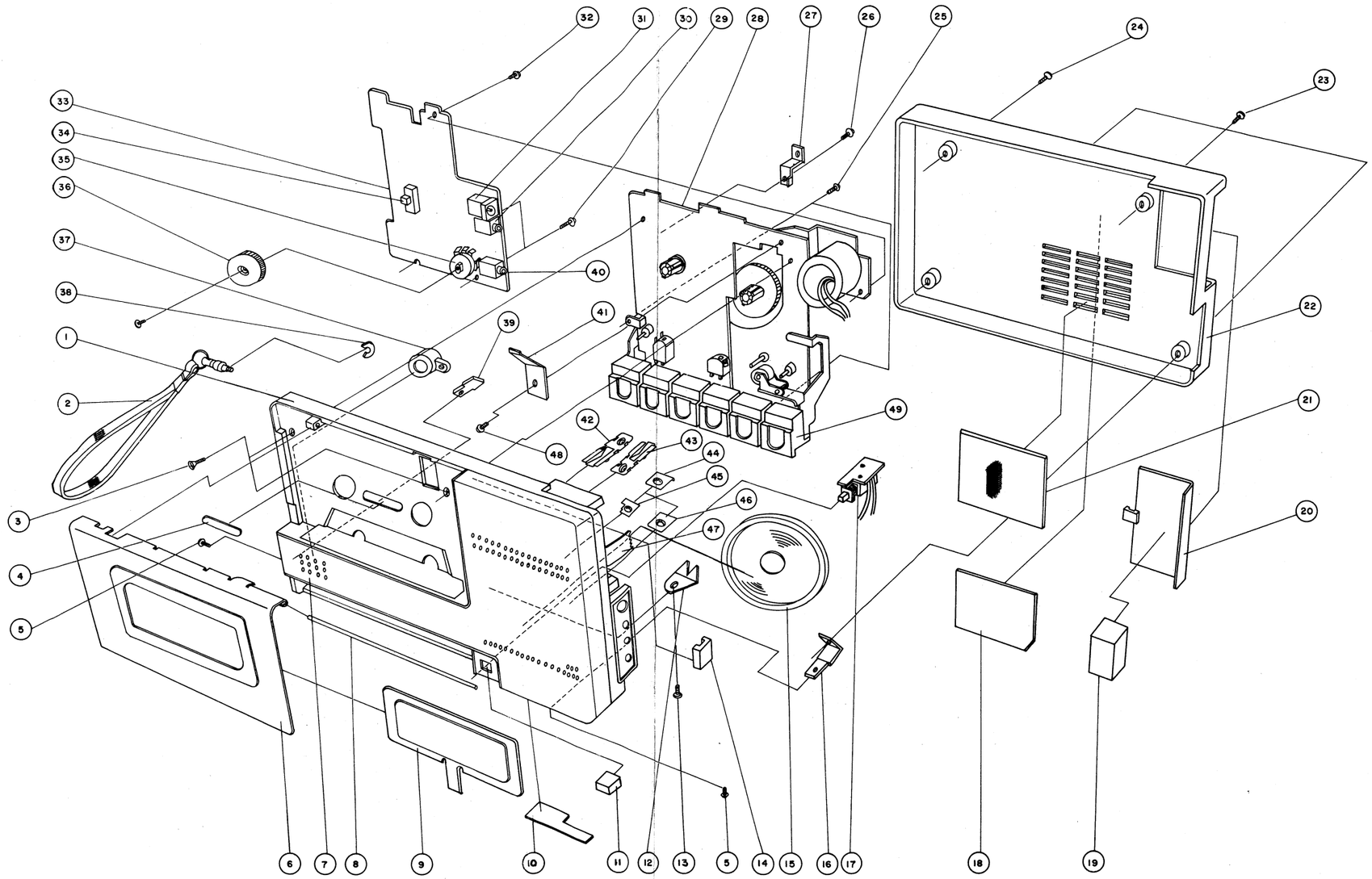
S/W NO	FUNCTION	MODE
S1-1-6	RECORD	PLAY
	PLAY	
S2	ON/OFF	OFF
S3	ON/OFF	OFF

o This schematic may be changed for improvement of performance without notice.

ELECTRICAL PARTS LOCATION AND WIRING DIAGRAM



EXPLODED VIEW FOR CABINET



MECHANICAL PARTS LIST

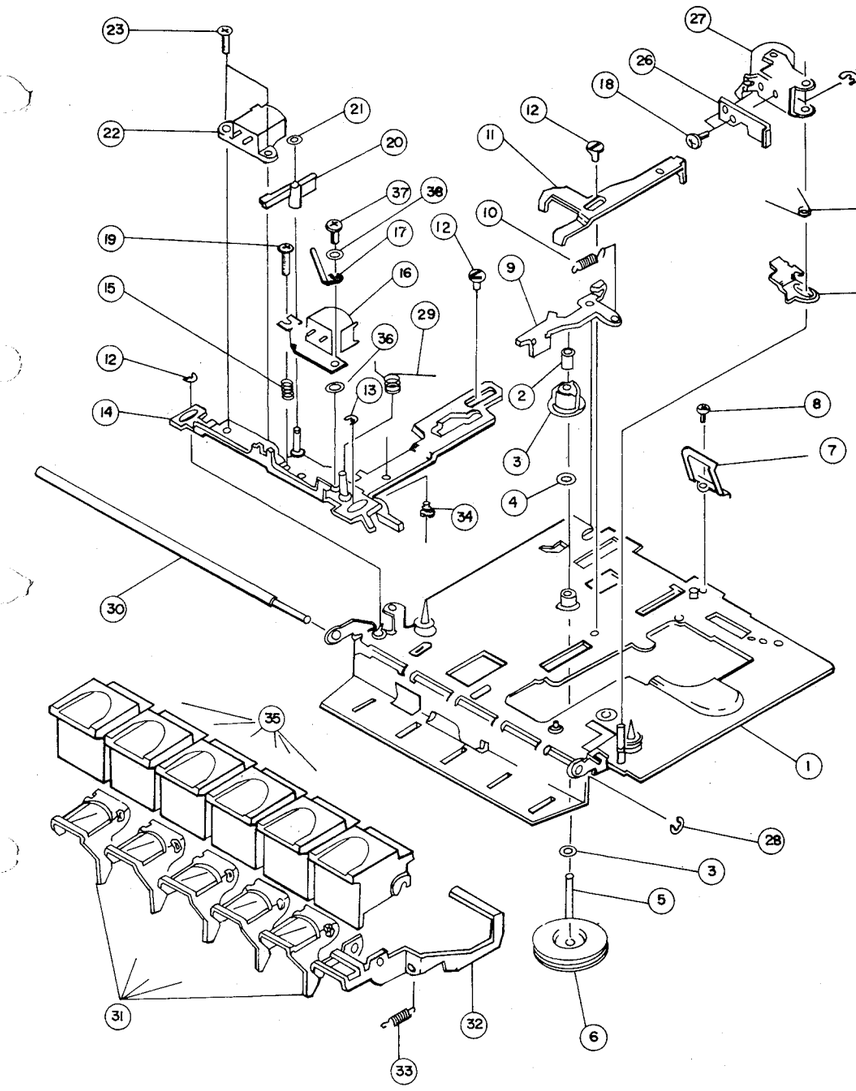
NO.	PART NO.	DESCRIPTION	QUAN
1	217-289A	TOP CASE	1
2	262N005C	STRAP AY	1
3	MCC0930I	SCREW	2
4	251-618A	DECO PLATE	1
5	MBC0918K	SCREW	2
6	221-417A	CASSETTE COVER	1
7	365-005A	PUNCHING METAL	1
8	423-276A	SHAFT	1
9	236-146A	WINDOW	1
10	251-616A	VOL DEC PLATE	1
11	273-320A	PUSH KNOB	1
12	324N069A	SPEAKER HOLDER	1
13	353N025A	SPECIAL SCREW	1
14	323-616A	SHAFT FIXER	1
15	541N134A	SPEAKER	1
16	321-721A	BRACKET	1
17	554-609B	PUSH S/W SPJ22N	1
18	243-633A	LABEL (MAIN)	1
19	447N008L	CUSHION	1
20	221-418A	BATTERY COVER	1
21	473N005B	CLOTH PROTECT	1
22	217-290A	BOTTOM CASE	1
23	MPC1522J	SCREW MPC+2.6x4	3
24	TRQ1536J	SCREW	1
25	TRQ1536J	SCREW	2
26	MPC1522J	SCREW MPC+2.6x4	1
27	321-905A	BRACKET	1
28	411-024A	DECK MECHANISM AY	1
29	TRQ1836J	SCREW	1
30	572-042A	DC JACK	1
31	572-078A	JACK	1
32	MPC0922J	SCREW	1
33	513-535A	MAIN PWB	1
34	552-618A	SLIDE SWITCH	1
35	611-701A	VR	1
36	272-241A	MIC BUSHING	1
37	341-613A	VOLUME KNOB	1
38	WE00900O	E-RING	1
39	323-615A	FIXER	1
40	572-042A	JACK	1
41	442-653A	PLATE SPRING	1
42	563-628A	BATTERY TERMINAL	1
43	563-628B	"	1
44	563-627A	"	1
45	563-626A	"	2
46	563-627B	"	1
47	455N002G	BATTERY RIBBON	1
48	MPC1522J	SCREW	1
49	275-046A	BUTTON	1

ELECTRICAL PARTS LIST

NO.	SYMBOL NO.	PART NO	DESCRIPTION
1	IC1	668-151A	IC, UPC 1530C
2	S2	554-609B	SW, PUSH SPJ22N
3	S1	552-618A	SWITCH SLIDE
4	TR1	665-886D	TR, GOLD STAR GS9023J
5	D2, 3	651-001C	DIODE DETECT IS188FM-2
6	D1	652-015B	DIODE DETECT KES1555
7	D4	653-619A	LED, SLC 22UR5
8	–	572-078A	JACK, DC
9	–	572-042A	JACK, EAR
10	–	611-701A	VR, R
11	C6	CQ222M01	C, POLYESTER 0.0022MF-50V
12	C4	CQ102M01	C, POLYESTER 0.001MF-50V
13	C16, 18	CQ472M01	" 0.0047MF-50V
14	C14	CQ333M01	" 0.033MF-50V
15	C22	CQ683M01	" 0.068MF-50V
16	C1	CE224F01	C, ELECTROLYTIC 0.22MF-50V
17	C3, 15, 17	CE105F01	" 1MF-50V
18	C11	CE225F01	" 2.2MF-50V
19	C13, 20	CE475D01	" 4.7MF-25V
20	C10	CE106B01	" 10MF-10V
21	C9, 19	CE336B01	" 33MF-10V
22	C5, 7, 8	CE107 B01	" 100MF-10V
23	C12, 21	CE227B21	" 220MF-10V
24	R18	RD560J06	R, CARBON FILM 56-J 1/8WR
25	R8, 15	RD101J06	" 100-J 1/8WR
26	R1	RD561J06	" 560-J1/8WR
27	R4	RD472J09	" 4.7K-J1/4WM
28	R9	RD271J06	" 270-J 1/8WR
29	R13, 19	RD102J06	" 1K-J 1/8WR
30	R6	RD152J06	" 1.5K-J1/8WR
31	R11	RD472J06	" 4.7K-J1/8WR
32	R14	RD103J06	" 10K-J1/8WR
33	R16	RD183J06	" 18K-J1/8WR
34	R10	RD273J06	" 27K-J1/8WR
35	R5	RD333J06	" 33K-J1/8WR
36	R2	RD223J06	" 22K-J1/8WR
37	R12	RD154J06	" 150K-J1/8WR
38	R3	RD224J06	" 220K-J1/8WR
39	R17	RD394J06	" 390K-J1/8WR
40	R20	RD272J06	" 2.7K-J1/8WR
41	R7	RD153J06	15K-J1/8WR

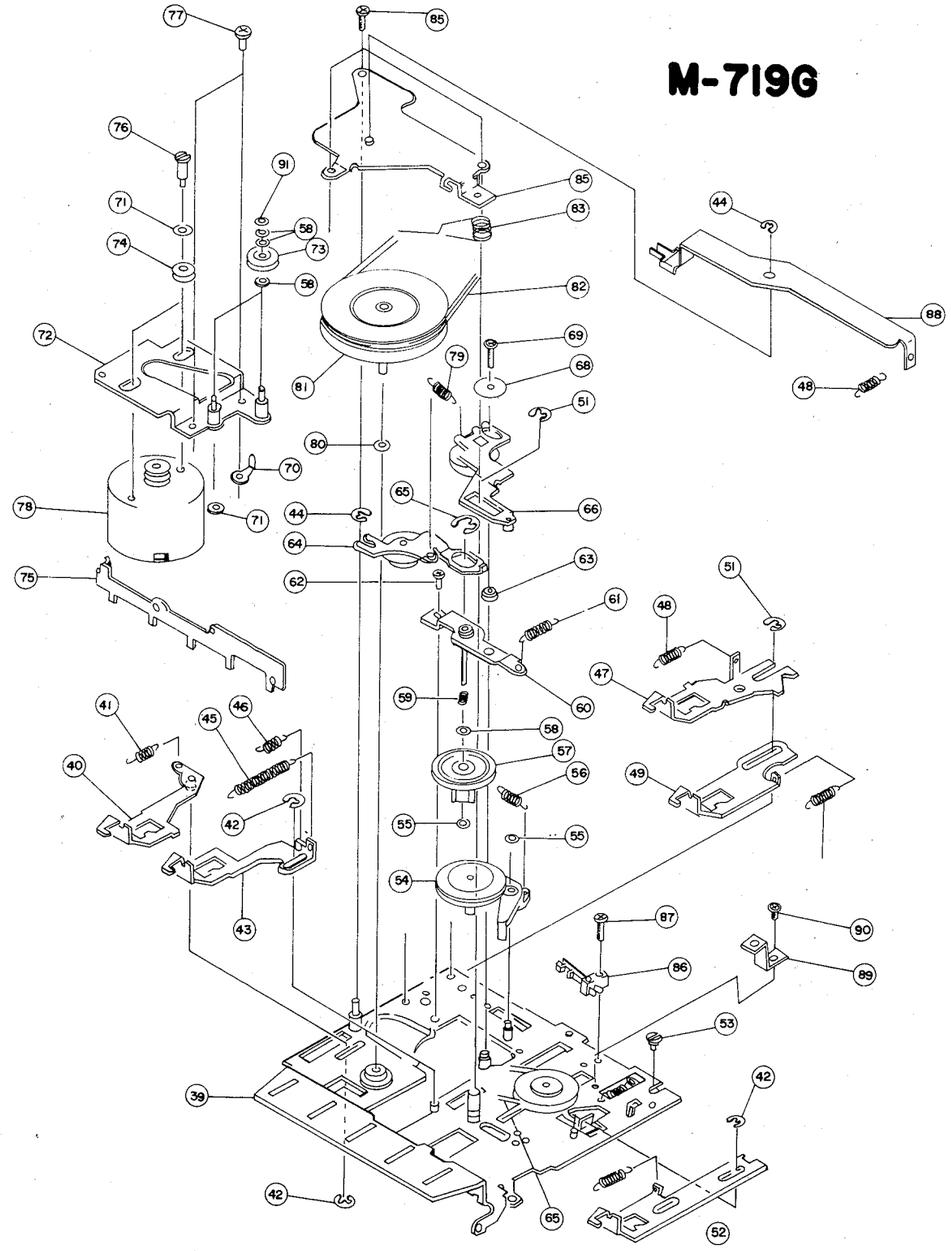
—— EXPLODED VIEW FOR DECK MECHANIS A ——

M-719G



—— EXPLODED VIEW FOR DECK MECHANISM B ——

M-719G



PARTS LIST FOR DECK MECHANISM A, B

NO.	PART NO.	DESCRIPTION	NO.	PART NO.	DESCRIPTION
1	KBC 00154	Mecho Plate Ay	47	KBE 10156	F.F plate
2	KBE 10613	S reel hole busher	48	KBE 10228	Tension coil
3	KBE 10177	S reel hole	49	KBE 10159	Rew. Plate
4		Washer	50	KBE 10229	Tension coil
5	KBE 10165	S reel shaft	51		Stopping washer
6	KBE 10172	Rew pulley	52	KBD 10188	REC. plate
7	KBE 10277	Cassette spring	53	KBE 10233	Stopping shaft
8		Screw, M2x3	54	KBE 00056	Slip clutch Ay
9	KBE 10226	REC lever	55		Washer
10	KBE 10235	Take up spring	56	KBE 10233	Tension coil
11	KBE 10239	Switch connecting plate	57	KBE 00052	Nylon Washer
12	KBE 10233	Stopping shaft	58		Washer
13		Stopping washer	59	KBE 10213	Tension coil
14	KBE 00046	Head plate Ay	60	KBE 00051	T reel plate Ay
15	KBE 10579	Press coil spring	61	KBE 10234	Tension coil
16	KBE 10739	R/P head	62		Screw, M2x3
17	KBE 10616	Head lead holder	63	KBE 10222	REW idler,guide shaft
18		SCrew, M2x4	64	KBE 00053	F.F idler Ay
19		Screw, M2x8	65		Stopping washer
20	KBE 10237		66	KBE 00059	REW idler Ay
21		Nylon washer	67	KBE 10578	Belt
22	KBE 10203	Erase head	68		Plane washer
23		Screw	69		Screw, M2x6
24	KBE 10236	Explode plate	70	KBE 10763	Lug
25	KBE 10225	Pinch roller spring	71		Plane washer
26	KBE 10136	Stopper plate	72	KBE 00043	Motor bracket
27	KBE 00048	Pinch roller	73	KBE 00040	Belt pulley
28		Stopping washer	74	KBE 10207	Motor cushion
29	KBE 10224	Pinch spring	75	KBE 00062	Button frame
30	KBE 10152	Button shaft	76	KBE 10208	Motor fixing shaft
31	KBE 10187	Button lerer	77		Screw, M2.6x4
32	KBE 10138	Eject lever	78	KBE 00041	Motor
33	KBE 10228	Take up spring	79	KBE 10232	Tension coil
34	KBE 10672	Stopping shaft B	80		Nylon washer
35	KBE 10106	Push button	81	KBE 00038	Fly wheel Ay
36	KBE 10773	Spacer	82	KBE 10579	Belt
37		Screw, M2x4	83	KBE 10221	Idler Screw
38		Plane washer	84	KBE 00063	Fly wheel sport plate
39	KBC 00064	Mecha. Plate Ay	85		Screw, M2x3
40	KBE 00044	Stopping Plate Ay	86	KBE 10506	Reel sw
41	KBE 10734	Coil spring	87		Screw, M2x8
42		Stopping washer	88	333-628A	Recording lever
43	KBE 10157	Play plate	89	KBE10570	Mecha. bracket
44	WEO 1400Q	Stopping washer	90		Screw, M2.6x3
45	KBE 10231	Tension coil	91		Nut
46	KBE 10230	"			